



**Ka'ena Point Ecosystem Restoration Project Briefing Packet**

## Background

### Project Description

The Ka'ena Point Ecosystem Restoration Project is an integrated management and education effort to protect, preserve and restore the native environment of Ka'ena Point Natural Area Reserve (NAR) for the benefit of future generations. The cooperating partners are the Hawai'i Department of Land and Natural Resources, U.S. Fish and Wildlife Service, the Wildlife Society, Hawai'i Chapter with the support of local conservation and education groups. A key component of the restoration project is the construction of a predator-proof fence to keep out invasive mammals that threaten the native and endangered species at the Reserve.

### Location of Project

Ka'ena Point NAR is located at the northwest tip on the island of O'ahu. It is about 10 miles west of Waialua on the North Shore and 10 miles north of Wai'anae on the Leeward coast. Ka'ena Point NAR as well as the adjacent Ka'ena Point State Park are owned and managed by the State of Hawai'i. Ka'ena Point NAR is within the ahupua'a of Ka'ena and Keawa'ula.

### Need for a predator-proof fence

Within Ka'ena Point NAR is an excellent example of the type of coastal strand environment that can be found in the Northwestern Hawaiian Islands. The difference is that just about anyone on O'ahu can get to Ka'ena Point to see one of the largest seabird colonies in the main Hawaiian Islands and also a variety of rare and endangered plants and animals. There are also significant Hawaiian cultural sites including the Leina a ka 'Uhane, a spirit leap where the fate of departing souls is determined as death nears and Pōhaku o Kaua'i, a partially submerged rock outcrop associated with legends. Ka'ena has also been an important area for fishing and salt making for native Hawaiians of the region.

The special resources at Ka'ena are under threat. Animals like dogs, cats, and mongooses have killed ground-nesting seabirds like the 'ua'u kani (Wedge-tailed Shearwater) and mōlī (Laysan Albatross), especially the young before they can fly. Rats eat seabird eggs and chicks and even attack adult birds. Rats and mice also eat native plants and seeds. Despite intensive efforts to control these predators, they still pose a major threat to the survival of native species.

The predator-proof fence is a tool that will help reach the goal of restoring the area to provide a safe place for Hawaii's native plants and wildlife by removing destructive alien species that harm them. New technology in pest-proof fencing holds the key to keep out all kinds of pests, from large animals such as pigs and dogs, to small animals such as mongoose and rats. By removing these alien species, we have a chance to preserve a rare and precious piece of Hawai'i for future generations to learn from and enjoy.

The predator proof fence uses technology that has been used with great success in New Zealand in both coastal and forested areas. Trial predator-proof fences were constructed on the slopes of Mauna Loa on Hawai'i, demonstrating their effectiveness in excluding rats, cats, and mongoose and allowing the development of methods to exclude mice on 'a'ā substrate. Ka'ena Point will be the first project-level

fence of its type constructed in Hawai'i. The project presents an exciting opportunity to utilize a fencing technology that may prove useful in other areas of Hawai'i.

### Fence Alignment and Design

The fence will enclose approximately 59 acres of the Ka'ena Point NAR. The fencing corridor will be approximately four meters (13 feet) wide and 622 meters (2,040 feet, approximately 2/5 mile) long. The fencing alignment largely follows a World War II-era roadbed that skirts along the bottom of the hill behind Ka'ena Point, above the sand dunes. By following this track at the base of the slope, the alignment places the fence along the least visually intrusive area of the point, so that the greatest area might be enclosed while minimizing interference with viewplanes and avoiding further disturbance to the delicate habitat. Figure 1 illustrates the area and the fence alignment.

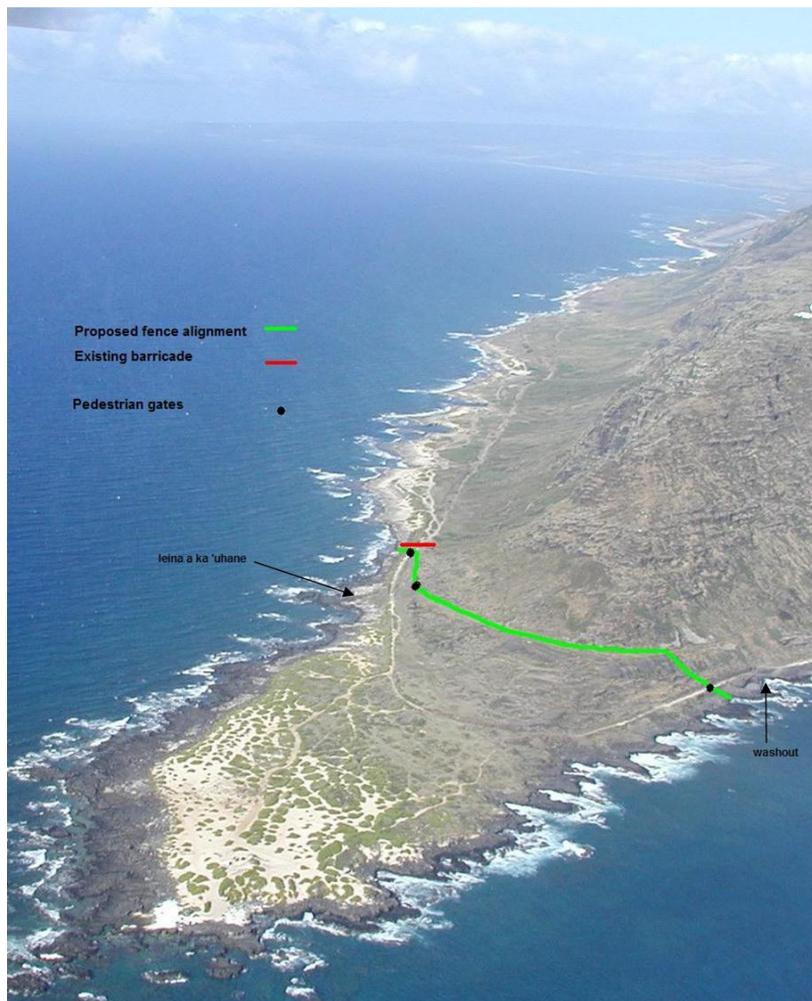


Figure 1 – Proposed fence alignment at Ka'ena Point NAR

The existing roadbed that forms the main portion of the fence corridor is fairly level, and as a result, limited vegetation clearing will be required to make it suitable as a fence platform. Where the fencing leaves the existing roadbed, the corridor will be cleared of vegetation and some earthworks will be created to form the fencing platform. Ground preparation will involve the use of a bulldozer and excavator to move soil or rocks to form a level stable platform and to gently contour the ground so that rain water moves away from the fencing. No material would be imported from off-site; only soil and rock from within the planned fence corridor will be utilized. Overall, less than one acre of land area will be disturbed.

The fence design has three main elements: base fence, predator-proof mesh and skirt, and predator-proof rolled hood (see Figure 2). The base fence provides the structural strength and framework on which predator-proof components may be added, and will be made of anodized aluminum posts and stays, with stainless steel wires and fastenings. Fence materials and equipment will either be flown in by

helicopter or driven and carried to the fence corridor. A container will be temporarily placed onsite, at the middle of the fenceline above the reserve and away from the majority of hikers, to provide secure storage for materials, tools, and equipment and to act as an on-site base of operations.

Anodized aluminum posts will be set into the ground three meters (9.8 feet) apart. One meter (3.3 feet) of the post will be buried, while two meters (6.5 feet) remains above ground. Marine grade stainless steel mesh with an aperture of 6 x 25 millimeters (0.2 x 1.0 inches) is attached to the entire face of the base fence, and is also used to form a skirt of horizontal mesh at ground level, to prevent predators from tunneling under the fencing. The mesh extends from the top of the posts to just below ground level, while the skirt will extend 300 millimeters (1 foot) from the fence, and will be pinned to the ground where possible.

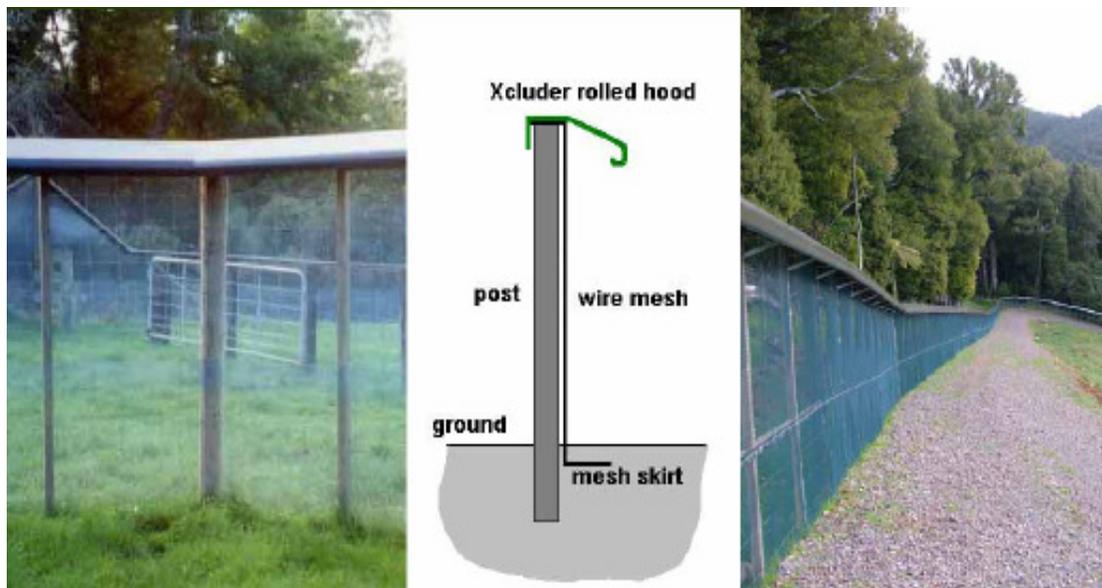


Figure 2 – Fence design example from New Zealand

Access doors are to be incorporated at locations where the fencing crosses existing trails at both the Mokulē'ia and Wai'anae entrances and a third door above the Leina a ka 'Uthane to allow access to a fishing ko'a (shrine). To minimize the opportunity for predator incursion if doors are propped open, a double-door system is planned where both doors cannot be open at the same time. Instead, a person accessing the reserve must wait for the first door to close before the second door may be opened. An emergency over-ride button will be incorporated into the design, on the interior of the fencing, so that individuals will not be trapped inside the reserve if someone props the outside door open. The area between the doors will be constructed with the same quality and design as the rest of the fence and will be large enough that up to nine people may enter together or so that a person can enter with a bicycle or fishing pole. Figure 3 shows an example of a double-door access gate.



Figure 3 – Example of double-door access gate

### Biological Monitoring

Perhaps one of the most critical components to the Ka'ena Point Ecosystem Restoration Project is to monitor biological changes, in both native and non-native species, in order to determine how successful the project has been in restoring native species, and to determine the most effective method of removing non-native species.

Extensive monthly seabird monitoring has been done for the past 7 years by both state and university biologists, and will continue to be conducted after construction. Botanists from the University of Hawai'i completed an extensive botanical survey to determine the plant species present and where they are found in the Reserve, and invertebrate monitoring will also be done prior to construction so that all native species present are accounted for.

Biological monitoring of pest species was also done during four separate weeks in 2008 to document species present, their abundance, reproductive cycle, and home range in order to select the most effective removal method. Currently, cats, mongoose, mice and black rats are found in the Reserve, with mice being the most abundant pest animal.

## Project-Related Chronology of Events

- 1983 – Ka'ena Point Natural Area Reserve (NAR) established
- 1989 – Off road vehicles prevented from entering Ka'ena Point NAR
- 2005 – Testing of New Zealand fence technology on Hawai'i Island, sponsored by the U.S. Fish and Wildlife Service (USFWS)
- 10/2006 – More than 150 fledgling seabirds killed at Ka'ena Point NAR by dogs and cats
- 11/2006 – Proposal to move the fence to Ka'ena Point NAR
- 12/2006 – USFWS, DLNR, and The Wildlife Society, Hawai'i Chapter form a partnership to build the predator-proof fence
- 2007 – Upwards of 50 seabirds killed at Ka'ena Point NAR by dogs and cats
- 7/2007 – DLNR completes Summary of Known and Possible Historic Properties at Ka'ena Point report for the Ka'ena Point Fence and Ecosystem Restoration Project
- 10/2007 – Broad outreach efforts about the Ka'ena Point Ecosystem Restoration Project commences
- 12/2007 – Draft Environmental Assessment available for public review
- 07/2008 – Modifications to fence design based on comments/concerns
- 10/2008 – Contested cases filed to Board of Land and Natural Resources (BLNR)
- 05/2009 – Contested cases dismissed by BLNR due to lack of standing
- 06/2009 – Final Environmental Assessment and Cultural Assessment completed
- 07/2009 – Applications made to City & County for Special Management Area, shoreline variance, and grading permits
- 08/2009 – Interviews conducted to hire Ka'ena Point Interpretive Ambassador funded by grant from the Hawai'i Tourism Authority

## Frequently Asked Questions

**Q: *Where is Ka'ena Point?***

A: Ka'ena Point is located at the very northwest tip on the island of O'ahu. It is about 10 miles west of Waialua on the North Shore and 10 miles north of Wai'anae on the Leeward coast. Ka'ena Point Natural Area Reserve (NAR) as well as the adjacent Ka'ena Point State Park are owned and managed by the State of Hawai'i.

**Q: *What's so special about Ka'ena Point Natural Area Reserve?***

Ka'ena Point is an excellent example of the type of environment that can be found in the Northwestern Hawaiian Islands. The difference is that anyone on O'ahu can get to Ka'ena Point to see one of the largest seabird colonies in the main Hawaiian Islands and also a variety of rare and endangered plants and animals. There are also cultural sites including the Leina a ka 'Uhane, a spirit leap important to Hawaiian culture.

**Q: *What's the problem at Ka'ena Point Natural Area Reserve?***

A: The special resources at Ka'ena are under threat. Animals like dogs, cats, and mongooses have killed ground-nesting seabirds like the ua'u kani (Wedge-tailed Shearwater) and mōlī (Laysan Albatross), especially the young before they can fly. Rats eat seabird eggs and chicks and even attack adult birds. Rats and mice also eat native plants and seeds. Despite intensive efforts to control these predators, they still pose a major threat to the survival of native species.

**Q: *Why are dogs not allowed?***

A: It's understandable to want to exercise your dog and enjoy beautiful natural areas at the same time. Perhaps some people feel that their dog would never attack birds. However, it is an instinct of dogs, no matter how well trained, to go after birds on the ground. Signs about keeping dogs out are posted but they are often ignored. In 2006, more than 100 ground-nesting seabirds were killed by dogs at Ka'ena NAR. Dogs could also harass resting Hawaiian monk seals. Both wild dogs and pets are problems.

**Q: *Why build a pest-proof fence?***

A: The idea to build a pest-proof fence at Ka'ena Point Natural Area Reserve was developed by the U.S. Fish and Wildlife Service, State of Hawai'i, and the Wildlife Society, Hawai'i Chapter, who are cooperating partners. The fence is a tool that will help reach the goal of restoring the area to provide a safe place for Hawaii's native plants and wildlife by removing destructive alien species that harm them. New technology in pest-proof fencing holds promise to keep out all kinds of pests- from large animals such as pigs and dogs, to small animals such as mongoose and rats. By removing these alien species, we have a chance to preserve a rare and precious piece of Hawai'i for future generations to learn from and enjoy.

**Q: *What will the fence look like?***

A: The fence will run along the base of the Wai'anae Mountains following the existing upper roadbed, approximately 2/5 of a mile in total length. It will come down to the high tide line at either end where there are existing entrances to the Natural Area Reserve, but will not fully encircle the reserve. It will use a wire mesh strong enough to keep large animals out and fine enough to prevent baby mice from entering. It will stand approximately 6.5 feet high with a rolled hood at the top and a skirt buried underneath the ground. The fence will be painted to blend into the background.

**Q: *Will the fence be an eyesore that takes away from the beauty of Ka'ena Point?***

A: Every effort will be made to reduce the visible impact of the fence. Because it will be above the peninsula for the majority of its length, it will not be visible when looking toward the ocean. And looking toward the mountain, it will blend into the hillside. It is hoped that the visual impact will be worth the value of creating an even more beautiful refuge for native plants and animals found nowhere else on O'ahu.

**Q: *How will the fence affect access?***

A: Access will remain the same. People will still be allowed to visit the reserve both during and after construction, with only a few short closed periods for safety measures (e.g. when equipment is brought in). There would be unlocked gates allowing people on foot and on mountain bikes to enter the reserve at entrances on both ends. People will still be able to visit the Reserve for fishing, hiking, bicycling, and other recreational and educational activities.

**Q: *Will cultural sites be impacted?***

A: It is important to protect cultural sites from any harm, fence or no fence. Archaeological surveys have been completed. The current design of the fence will avoid impact to any known Hawaiian cultural sites and in-depth discussions have been and will continue to be held with people who have general interest in cultural sites to minimize impact. A fence may actually protect cultural sites from damage.

**Q: *How long have seabirds been using Ka'ena Point?***

A: Seabirds have lived at Ka'ena Point for thousands of years, long before people arrived, and were once an important source of food for early Hawaiians inhabiting the area as evidenced by bird bones found in ancient campfires. While the birds abandoned nesting at Ka'ena for a time, with recent protection, they are now returning.

**Q: *Will the very birds you are trying to protect fly into it and get injured or die?***

A: This is obviously an important consideration. The fence is planned to follow the contour of the hill behind the breeding colony and should be out of the main flight path of the birds. There are ways to improve the visibility of the top and back of the fence for birds and place flexible meshing in potential strike areas, if necessary.

***Q: What will the effects of the fence be on Pueo, the native Hawaiian Owl?***

A: A predator-proof fence would provide one of the only safe nesting areas for pueo in all the Hawaiian Islands. Like seabirds, pueo nest on the ground and are vulnerable to cats, dogs and mongoose. Pueo naturally used to eat mostly birds and insects prior to the arrival of humans, so by improving seabird habitat, pueo will have more of its natural food source.

***Q: How do you know these fences work?***

A: While this type of pest-proof fence is new to Hawai'i, it has been tested and applied in New Zealand with great results in more than 50 projects. Hawai'i's environment shares many similarities with that of New Zealand. We are confident it will work with proper design and maintenance.

***Q: Who is paying for this project?***

A: Funds for the restoration of Ka'ena Point using this technology will be provided by the U.S. Fish and Wildlife Service through The Wildlife Society, Hawai'i Chapter. These funds are already allocated and have been given as a grant specifically for this project to the Hawai'i Department of Land and Natural Resources.

***Q: When will the fence be built?***

A: The construction date will be determined by a number of factors, including seasonal considerations and obtaining necessary permits, however the goal is to complete the fence in 2009.

***Q: How long will it take to build the fence and how long will it last?***

A: The experienced fence-building team from New Zealand estimates that it will take about a month to construct using labor that will include local people who will receive on-the-job training for building a fence of this kind. The fence materials are guaranteed to last 15-25 years.

***Q: How does the community feel about this project?***

A: There is generally strong support for this project. Since 2007, we have conducted a wide range of activities including site visits, presentations at organizations and schools, educational booths, surveys and individual meetings. We have also generated newspaper articles, television stories, a video, brochure and website. We have spoken to almost 2,000 people and reached thousands more indirectly through the media.

***Q: Will the public be able to comment on the plans for the fence?***

A: Absolutely. As part of the public review process, the public was given the opportunity to comment on the draft Environmental Assessment. While the Environmental Assessment is now final, we would still like to hear from you as education is an integral part of this project. Contact us at: [kaenapoint@yahoo.com](mailto:kaenapoint@yahoo.com) or write to: DLNR Natural Area Reserves System, 1151 Punchbowl St., Honolulu, HI, 96813. For more information, please see our website at <http://www.state.hi.us/dlnr/dofaw/kaena/index.htm>.

## Summary of Outreach Efforts and Responses

Since October 2007, the Ka'ena Point Ecosystem Restoration Project outreach team has been very active in the communities surrounding Ka'ena Point (both the Mokolē'ia and Wai'anae sides), and have consulted with hundreds of individuals and community organizations to give everyone accurate information and provide them the opportunity to give feedback. (See Outreach Contacts spreadsheet and Summary of Comments for details.)

Overall the vast majority of people who have been contacted support this project strongly and are interested in ensuring that Ka'ena Point NAR is protected for the long-term.

In conjunction with the community outreach, during the pre-consultation period, the DLNR sent a scoping letter to over 90 government agencies, organizations, and individuals that were identified as potential stakeholders for the project. Written comments were received from approximately 21 people or agencies. After the release of the Draft Environmental Assessment and media coverage, DLNR received only six additional telephone calls, all in support of the project.

The outreach team has met with groups such as the North Shore Neighborhood Board, Wai'anae Neighborhood Board, Mokolē'ia Community Association, Wai'anae Hawaiian Civic Club, Office of Hawaiian Affairs' Native Hawaiian Historical Properties Council, Earthjustice Legal Defense Fund, Sierra Club, Hawaiian Trail and Mountain Club, 'Ahahui Mālama I ka Lōkahi, Friends of Honouliuli, Hawai'i Audubon Society and Friends of Ka'ena. Presentations were made to teachers and hundreds of students and team members have also conducted many one-on-one meetings and site visits with respected kūpuna (native Hawaiian elders), community leaders, fishers and 4x4 club members where concerns were shared and addressed wherever possible.

The outreach team also conducted surveys at Ka'ena Point on three weekends to get input from actual users of Ka'ena Point about why they visit Ka'ena and what they think about the proposed fencing. The same survey was administered at the popular Hawai'i Fishing and Seafood Festival held at Pier 38. Of the 141 respondents, 95% of whom were from Hawai'i, 82% supported constructing the fence, 15% were possibly supportive, and 3% were unsupportive.

To reach a larger fishing community, two articles urging public input were published in the Hawai'i Fishing News (circulation 10,000). Similar articles were also printed in the North Shore News and the newsletter of the Hawaiian Trail & Mountain Club. The DLNR-DOFAW also published an article in its newsletter (Nā leo o ka 'āina, voices of the land). To reach the broader public, stories were publicized via mass media, specifically newspaper and television. Both the Honolulu Advertiser and Honolulu Star Bulletin have published stories. On television, news stories were aired on KHON, KHNL News 8 and KGMB. On OC 16's Outside Hawai'i, a 30 minute television show broadcasted statewide, three stories were aired, including a 10 minute video created by Mara Productions. A presentation made to the Wai'anae Neighborhood Board was aired repeatedly in early 2008 on 'Ōlelo Community Media. Two

representatives also participated in a 30 minute television show on 'Ōlelo, "William 'Āila Presents," which aired in December 2008.

Printed outreach materials include two brochures, a fact sheet on owls at Ka'ena Point, a Frequently Asked Questions sheet and a teacher education packet containing brochures, and lesson plan on native coastal environments in Hawai'i.

The outreach team also made a concerted effort to reach schools in the region. Letters and informational materials were sent to 16 schools and presentations were made to schools that requested them. Outreach was also conducted at fairs at four of the major colleges and universities on O'ahu.

A website for the project was also created and housed on the DLNR-DOFAW's site: <http://www.state.hi.us/dlnr/dofaw/kaena/index.htm>. Also a unique email account was established for the project, with email address: [kaenapoint@yahoo.com](mailto:kaenapoint@yahoo.com), to create an easy-to-remember way for the public to communicate their thoughts about the project.

To give a sense of what the fence might look like in the actual setting, artist's renderings were produced from three vantage points, which is available on the website. Also, a section of a real predator-proof fence (approximately 3' wide and 6.5' tall) was shown to stakeholders at various meetings, including at Ka'ena Point NAR.

Perhaps most exciting is the soon to be hired Ka'ena Point Ambassador position through the State DLNR. Ka'ena Point Ecosystem Restoration Project staff pursued and successfully obtained a grant from the Hawai'i Tourism Authority for a one year interpretive ambassador position. The position would be stationed at YMCA Camp Erdman and based primarily in the Ka'ena Point NAR itself to educate the public, provide volunteer coordination and lead service visits. The position was advertised in June 2009 and hiring will be completed in September. This position will be critical by providing on-site public outreach. Obtaining a second year of funding for this position will be a project priority.

To date, our combined outreach efforts have been effective in directly reaching nearly 2,000 people from O'ahu who may have some connection to Ka'ena Point, and engaging those who truly care about this special place in the process of making this project the best it could be.

## Summary of Comments from Outreach Meetings by Topic Areas

August 2007 – May 2009

### Access

- Make sure that public access is maintained. Don't exclude people.
- Make sure access for fishers is not impacted.
- Maintain cultural access to include fishers.
- Concern that access for disabled may be further impacted
- Could there be a way to have kūpuna and disabled people visit the Point?

### Aesthetics

- Talk to other experts about ways to camouflage the fence.
- Fence should be painted brown, not green, to blend into the hillside.
- The fence would ruin the wild, open feeling of Ka'ena.
- Concern about impact to viewplanes

### Archaeological sites

- Would like to see eroding archaeological sites be reinforced before construction.
- Concern about impact on ancient burials
- Don't disturb the fishing shrines.

### Community outreach

- Utilize video and 'Ōlelo (TV) to get the word out.
- Make renderings of how the fence would look from different angles (computerized views we can show in photos and on Power Point)
- Find a community-based model for taking care of the place.
- Reach out to more Hawaiian people.

### Construction

- Have botanists and archaeologists on site during construction.
- Concern that driving fence footings 3' deep may mean that some bones or sacred rocks will be disturbed
- Concern about erosion

### Cultural practices

- Request a TCP (Traditional Cultural Properties) model
- Don't put fence near Pōhaku o Kaua'i. Families have buried piko (umbilical cords) there.
- Concern over how the cultural sites, especially the leina, will be treated.
- DLNR needs to listen more to cultural practitioners and take them seriously.
- DLNR is competing with Hawaiian communities.
- Concern about putting limits on the transfer of cultural practices to future generations

### **Education**

- The educational potential for the project is great, especially with the native plants and animals.
- Have area schools involved.
- Work with Kamaile Elementary (charter school)
- Get young families and kids involved.
- There needs to be much more education at Ka'ena and more enforcement to catch people doing bad things and kick them out.

### **Fishing**

- Make sure the area between fence gates are big enough for the long ulua fishing poles. Is it possible to pass fishing poles over the fence?
- Work with fishers to create a docent program. Give them kuleana (responsibility). That would give them continued access with responsibility to care for the place. Need to educate them.

### **Leina a ka 'uhane**

- Some kūpuna are concerned about the spirit path being blocked by the fence. Consider moving the fence so it does not include the leina or put in a walk-through gate above the leina to acknowledge and recognize the spirits' paths.
- Don't block the path between the leina and the sacred site above.
- Some kūpuna feel that fence will not block the spirits.
- Some people do not feel that the 'uhane (spirits) can pass through the fence with or without the additional gate.

### **Maintenance**

- Concerns about vandalism and maintenance; DLNR has a chronic budget shortage.
- Put a camera on the lighthouse that can be monitored 24/7 via Internet. Then you can zoom in on potential violations.

### **Marine environment**

- Concern about potential damage to marinescape
- Concern about impact to Hawaiian monk seals

### **Restoration of native plants, animals and ecosystems**

- Would the fenced area negatively impact the biodiversity of the area outside of the fence?
- Would the fence affect monk seals where the fence meets the coastline?
- Is there a correlation between the reduction of pueo population with the increased use of rodenticide?
- If the rat population is reduced/eliminated, will the pueo start eating the native bird chicks?
- What should be the baseline population of the albatrosses? There never were stories from the past of having so many albatrosses. Is the ecosystem going to be off balance?

- Skeptical as to whether the fence will work. People have messed things up in the past by trying to do good (like the mongoose and rat) but found out the solution didn't work.
- The improvements over time at Ka'ena have been positive, especially through keeping vehicles out.
- Some people would like to plant native plants at Ka'ena.
- Ka'ena is as close to the Northwestern Hawaiian Islands as most people will ever get. It needs to be protected and can be a great place for learning.
- This is about saving things that have been here before us. We're losing all these things. Ka'ena is one of the last places.
- Protection should extend to all endangered and threatened species that may be impacted by the use of rodenticide, run-off, and other potential harms.

### **Volunteers**

- How can volunteers be involved?
- Interest in volunteering for service trips.
- The Hawaiian Civic Clubs may be interested in volunteering to help with native plants.

### **Other**

- Concern over deliberately set fires.
- How did the State acquire Ka'ena? Who did they consult (families)?
- Don't want to see railway or road reopened around the Point.
- Don't want to see lots of tourists at Ka'ena Point.

## Media Outreach

Fall 2007 – Spring 2009

### Print

- Hawai'i Fishing News, "Ka'ena Point Restoration," October 2007
- North Shore News, "Ka'ena Point Ecosystem Restoration Project Seeks Public Input," October 2007
- Along the Trail, Hawaiian Trail & Mountain Club newsletter, "Ka'ena Point Ecosystem Restoration Project Seeks Public Input," October – December 2007
- Honolulu Advertiser, "Ka'ena Predators Targeted," January 7, 2008
- Honolulu Star Bulletin, "Kōkua Line: Ka'ena Point's Ecosystem Might Get Barrier Fence," January 20, 2008
- Nā Leo o ka 'āina, newsletter of the Hawai'i Department of Land and Natural Resources, Division of Forestry and Wildlife, "Ka'ena Point Ecosystem Protection Project Seeks Public Input," Winter 2008
- Hawai'i Fishing News, "Ka'ena Point Restoration," February 2008
- Honolulu Advertiser, "Ka'ena Point Camping Can Be Kept in Bounds" editorial, November 12, 2008
- Honolulu Star Bulletin, "Crossroads at Ka'ena," March 15, 2009
- Bird Conservation, The Magazine of the American Bird Conservancy, "Fencing for Successful Conservation on Hawai'i," by George Wallace, Spring 2009
- Pacific Seabird Group Bulletin, "Conservation Updates: Ka'ena Point Ecosystem Restoration Project Obtaining Final Permits," by Craig Harrison, Spring 2009

### Television

- KHON, "Predator Proof Fence Proposed for Ka'ena Pt.," November 9, 2007
- 'Ōlelo Community Media, "Wai'anae Neighborhood Board Meeting," December 2007
- OC16's "Outside Hawai'i," "Ka'ena Point NAR Ecosystem Protection, parts I and II", March 2008 (These stories are also available on YouTube.)
- "Restoring a Sanctuary – Ka'ena Point," a video by Mara Productions aired on OC16's "Outside Hawai'i," 2008
- KHNL/KFVE, "Making Ka'ena Point Safe for Native Hawaiian Species," May 23, 2008
- 'Ōlelo Community Media, "William 'Āila Presents," December 2008
- KGMB, "New Fence to Shield Ka'ena Point," March 26, 2009

## Renderings of Fence

